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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,428	01/30/2006	Marko Ramisch	P4712-4	1088
2352 7590 09/12/2008 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403				
EXAMINER				
BELL, BRUCE F				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
09/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/539,428

**Applicant(s)**

RAMISCH ET AL.

**Examiner**

Bruce F. Bell

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Ganski et al (DE1021630).

Ganski et al discloses a contact plate for a fuel cell formed of a graphite-thermoplastic composite. The edge areas of a non-conductive material surrounding the contact plate and seals, can be integrated by way of injection molding, so that the entire plate including the edge area seals are produced by the injection molding process. See abstract. The fuel cell is made up of an MEA where hydrogen and oxygen are used as fuel and oxidant and the fuel cell assembly is made up of a plurality of fuel cells stacked together one upon or behind another and are held together by end plates supplied before the first and last fuel cell in the stack. See page 1, paragraphs 0001-0003 of the translation. Bipolar plates are used to make electrical contact between successive cells and for removal of the reaction mediums made over transport paths. See page 1, paragraph 0004 of the translation. The frame is formed in such a way that it simultaneously fulfils a sealing function, when compressing the sealing frames of successive fuel cells in the fuel cell stack. See page 5, paragraph 0002 of the translation. Frames 43 of an elastomer are advantageous for avoiding leaks between

successive cells. The sealing frame is constructed in such a way that in the compressed state it protrudes over the surface of the plate 7 flush with the electrodes 2 or 3 embedded in the recess 36 by half the thickness of the membrane coated with a catalyst. See page 5, paragraph 0003 of the translation. The frame is provided on the surface with a peripheral projection (tongue) 46 and on the rear surface with a corresponding groove 47 representing elements fulfilling a sealing function. When the stack is tightened, each tongue engages in the groove of the frame of the following plate (providing a tongue and groove joint) so that a tight seal is achieved. The cross-sections of the interlocking projections (tongues) and grooves are typically trough-shaped. In order to improve the sealing effect, a conventional non-illustrated sealing material, preferably a flat sealing strip, can be laid in the groove and then compressed under the action of the projection or molding on the frame of the adjacent plate and thus tightly seal the gap between the two frames. In particular, when such an additional flat seal is used, it is not necessary for the frame to be made of an elastic plastic. An alternate embodiment wherein a sealing material is applied to the surface of the plate or frame during injection molding is also disclosed, so that the sealing grooves are provided in the surface of the plate or frame in order to hold the sealing material. See page 5, paragraphs 0006 and 0007.

The prior art of Ganski et al anticipates the applicants instant invention as instantly claimed. Ganski et al although referred to as a fuel cell, has the same structural aspects as that of an electrolyzer and since it is well known that an electrolyzer works in reverse of a fuel cell, it would be within the ability to take the same

apparatus as recited and simply connect the electrical connections in reverse to break down the water into hydrogen and oxygen rather than to take the hydrogen and oxygen and react it to produce water as is done in a fuel cell. Further, fuel cells are known to be run under pressure for the purpose of moving the reactants and oxidants through the system and further as shown in the Ganski et al patent the system is tightened and sealed to accommodate such pressure on the apparatus and further utilizes an end plate on each end of the fuel cell stack. Applicants recitation in claim 21 to the rigid element being at least partially embedded in the elastic material appears to be met by virtue of the plate or frame being made of a composite graphite-thermoplastic material which graphite aids in making the plate or frame rigid in nature. Therefore it appears that this aspect of the invention has been met. The power connections appear to be met by virtue of the normal configurations of such fuel cells in that these cells are typically connected in series and therefore, the only connections would be at the ends of the completed cell stack. Therefore, the prior art of Ganski et al anticipates the applicants instant invention as set forth by way of the disclosure to Ganski et al above. Applicant will probably argue that their priority date is before that of Ganski et al, however, the examiner would like to point out that applicants have not perfected their priority by submission of a certified English translation of such priority document. Until such time as this translation is received and it can be ascertained by the examiner that this document has support for what is presently being claimed, the rejection will stand.

***Response to Arguments***

3. Applicant's arguments with respect to claims 20-34 have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant's arguments, see amendment, filed August 8, 2008, with respect to claims 20-34 have been fully considered and are persuasive. The rejection of claims 20-34 has been withdrawn and a new rejection as shown above has been made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BFB  
September 11, 2008

/Bruce F. Bell/  
Primary Examiner, Art Unit 1795